

CLAIMS

5 ~~1/ A method of allocating data transmission channels to a~~
 mobile station, in particular in half-duplex mode, in a
 mobile telecommunications network of the type using
 packet mode and having multiple access by multiplexing
 transmission channels, in which method the transmission
 channels allocated to a mobile station, respectively in a
 "down" direction from the network to the mobile station,
 and in an "up" direction from the mobile station to the
 10 network, can change at each "allocation period", a
 transmission authorization received over a transmission
 channel in the down direction for a given allocation
 period indicating that said transmission channel is
 allocated in the up direction for the following
 15 allocation period;

wherein a transmission authorization received over a
 transmission channel in the down direction for a given
 allocation period indicates that not only said
 transmission channel, also referred to as the
 20 authorization channel, but also consecutive transmission
 channels identifiable from said authorization channel
 using a predefined relationship, are allocated in the up
 direction for the following allocation period.

25 2/ A method according to claim 1, wherein said predefined
 relationship is such that a window is defined which is
 formed of adjacent transmission channels and in which the
 authorization channel is transmitted, said consecutive
 transmission channels being constituted by those of the
 30 transmission channels of the window which lie between the
 authorization channel and the last time slot in the
 window (including said last time slot), and which can be
 allocated to the mobile station for a given call.

35 3/ A method according to claim 1, wherein said
 authorization channel is displaced, as a function of the
 quantity of data to be transmitted by the mobile station,

so as to reduce, or to increase, the number of said consecutive channels, depending on whether said quantity of data decreases, or increases.

5 4/ A method according to claim 1, wherein the number of transmission channels allocated for reception is reduced when the number of said consecutive channels is increased, so as to leave a guard time between reception and transmission that is long enough to make half-duplex
10 mode operation possible.

15 5/ A method according to claim 1, wherein the authorization time slot serving to authorize transmission of an acknowledgement by the mobile station, in a single transmission channel, is displaced so as to increase the number of said consecutive channels, thereby reducing the number of transmission channels allocated for reception, so as to release transmission channels to enable the mobile station to listen to the network.

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sub. a1
6/ A mobile station, for implementing a method of allocation according to claim 1, said mobile station including:

25 receive means for receiving transmission channels over said down frames, and for detecting transmission authorizations in the received channels;

transmit means for transmitting transmission channels over said up frames; and

30 control means for controlling the transmit means and the receive means, so as to enable said method to operate.

35 7/ A fixed station for a telecommunications network, for implementing the method according to claim 1, said fixed station including:

transmit means for transmitting data in transmission channels over said down frames, as well as transmission authorizations over some of the transmitted channels;

5 receive means for receiving transmission channels over said up frames; and

control means for controlling said transmit means and said receive means, so as to enable said method to operate.

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